

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Use as many sheets as necessary)

Page 1 of 5

Application Number

10/726900

Filing Date

December 3, 2003

First Named Inventor

Hester, Jonathan F.

Art Unit

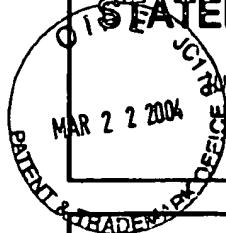
1771

Examiner Name

Unknown

Attorney Case Number

58770US002



U.S. Patent Documents

Exam. Init.*	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
u	A1	US- 3,472,765	10-14-1969	W.E. Budd et al.	
u	A2	US- 3,679,059	07-25-1972	Wyatt et al.	
u	A3	US- 3,708,071	01-02-1973	Crowley	
u	A4	US- 3,847,657	11-12-1974	Rieber et al.	
u	A5	US- 4,002,567	01-11-1977	Konno et al.	
u	A6	US- 4,053,418	10-11-1977	Newman	
u	A7	US- 4,181,604	01-01-1980	Onishi et al.	
u	A8	US- 4,264,447	04-28-1981	Nicolet	
u	A9	US- 4,302,270	11-24-1981	Nicolet	
u	A10	US- 4,333,779	06-08-1982	Rinker et al.	
u	A11	US- 4,416,993	11-22-1983	McKeown	
u	A12	US- 4,440,641	04-03-1984	Ostertag	
u	A13	US- 4,539,256	09-03-1985	Shipman	
u	A14	US- 4,701,234	10-20-1987	Rogemont et al.	
u	A15	US- 4,746,435	05-24-1988	Onishi et al.	
u	A16	US- 4,869,821	09-26-1989	Korin	
u	A17	US- 4,871,456	10-03-1989	Naruo et al.	
u	A18	US- 4,886,601	12-12-1989	Iwatsuka et al.	
u	A19	US- 5,069,403	12-03-1991	Marentic et al.	
u	A20	US- 5,071,553	12-10-1991	Newlin	
u	A21	US- 5,116,506	05-26-1992	Williamson et al.	
u	A22	US- 5,156,780	10-20-1992	Kenigsberg et al.	
u	A23	US- 5,192,456	03-09-1993	Ishida et al.	
u	A24	US- 5,248,424	09-28-1993	Cote et al.	
u	A25	US- 5,260,360	11-09-1993	Mrozinski et al.	
u	A26	US- 5,286,279	02-15-1994	Wu	
u	A27	US- 5,352,513	10-04-1994	Mrozinski et al.	
u	A28	US- 5,437,651	08-01-1995	Todd et al.	

*Examiner:

Date Considered:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Information Disclosure Statement)

Substitute for form 1449A/PTO (modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) Page 2 of 5	Application Number	10/726900
	Filing Date	December 3, 2003
	First Named Inventor	Hester, Jonathan F.
	Art Unit	1771
	Examiner Name	Unknown
	Attorney Case Number	58770US002

U.S. Patent Documents					
Exam. Init.	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
u	A29	US- 5,445,771	08-29-1995	Degen	
u	A30	US- 5,480,553	01-02-1996	Yamamori et al.	
u	A31	US- 5,482,625	01-09-1996	Shimizu et al.	
u	A32	US- 5,514,120	05-07-1996	Johnston et al.	
u	A33	US- 5,626,751	05-06-1997	Kikuchi et al.	
u	A34	US- 5,639,373	06-17-1997	Mahendran et al.	
u	A35	US- 5,651,888	07-29-1997	Shimizu et al.	
u	A36	US- 5,651,889	07-29-1997	Wataya et al.	
u	A37	US- 5,670,573	09-23-1997	Kirchner et al.	
u	A38	US- 5,690,949	11-25-1997	Weimer et al.	
u	A39	US- 5,738,111	04-14-1998	Weimer et al.	
u	A40	US- 5,783,083	07-21-1998	Henshaw et al.	
u	A41	US- 5,787,702	08-04-1998	Tiedtke et al.	
u	A42	US- 5,876,604	03-02-1999	Nemser et al.	
u	A43	US- 5,914,039	06-22-1999	Mahendran et al.	
u	A44	US- 5,922,201	07-13-1999	Yamamori et al.	
u	A45	US- 5,989,698	11-23-1999	Mrozinski et al.	
u	A46	US- 6,068,771	05-30-2000	McDermott et al.	
u	A47	US- 6,193,890	02-27-2001	Pedersen et al.	
u	A48	US- 6,287,467	09-11-2001	Nagano et al.	
u	A49	US- 6,290,685	09-18-2001	Insley et al.	
u	A50	US- 6,294,039	09-25-2001	Mahendran et al.	
u	A51	US- 6,325,928	12-04-2001	Pedersen et al.	
u	A52	US- 6,505,744	01-14-2003	Geaugey et al.	
u	A53	US- 6,514,412	02-04-2003	Insley et al.	
u	A54	US- 6,558,549	05-06-2003	Cote et al.	
u	A55	US- 6,589,317	07-08-2003	Zhang et al.	
u	A56	US- 2002/0011443	01-31-2002	Komatsu et al.	

*Examiner: <i>D. [Signature]</i>	Date Considered: <i>5/13/08</i>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute for form 1449A/PTO (modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) Page 3 of 5	Application Number	10/726900
	Filing Date	December 3, 2003
	First Named Inventor	Hester, Jonathan F.
	Art Unit	1771
	Examiner Name	Unknown
	Attorney Case Number	58770US002

U.S. Patent Documents					
Exam. Init.*	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
✓	A57	US- 2002/0195390	12-26-2002	Zha et al.	
✓	A58	US- 2003/0104192	06-05-2003	Hester et al.	
✓	A59	US- 2003/0203183	10-30-2003	Hester et al.	
✓	A60	US- 2003/0228459	12-11-2003	Mrozinski et al.	
✓	A61	10/438,090	Filed 05-14-2003	Hester et al.	

Foreign Patent Documents							
Exam. Init.*	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation (Check if yes)
		Ctry. Code	Number-KindCode (If known)				
✓	B1	EP	0 197 024	10-08-1986			
✓	B2	EP	0 443 642	08-28-1991			
✓	B3	EP	0 510 328	10-28-1992			
✓	B4	EP	0 526 823	02-10-1993			
✓	B5	EP	0 602 560	06-22-1994			
✓	B6	EP	0 653 240	05-17-1995			
✓	B7	EP	0 662 341	07-12-1995			
✓	B8	EP	1 127 849	10-26-1999			
✓	B9	EP	1 166 859	01-02-2002			
✓	B10	WO	97/44508	11-27-1997			
✓	B11	WO	98/01219	01-15-1998			
✓	B12	WO	99/65542	12-23-1999			
✓	B13	WO	99/65595	12-23-1999			
✓	B14	WO	99/65664	12-23-1999			
✓	B15	JP	62-155906	07-10-1987			
✓	B16	JP	1-155906	06-19-1989			
✓	B17	JP	1-155907	06-19-1989			
✓	B18	JP	9-120246	05-06-1997			

*Examiner: D. [Signature]	Date Considered: 5/13/05
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement)

Substitute for form 1449A/PTO (modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) Page 4 of 5	Application Number	10/726900
	Filing Date	December 3, 2003
	First Named Inventor	Hester, Jonathan F.
	Art Unit	1771
	Examiner Name	Unknown
	Attorney Case Number	58770US002

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
✓	C1	Keith Brindle, Tom Stephenson, Michael J. Semmens, "Pilot-Plant Treatment of a High-Strength Brewery Wastewater Using a Membrane-Aeration Bioreactor," Water Environment Research, Volume 71, Number 6, pp. 1197-1204 (Sept./Oct., 1999).
✓	C2	John T. Cookson, Jr., Bioremediation Engineering: Design and Application, McGraw-Hill, Inc., 1995, Chapter 8, pp. 305-358, and Chapter 9, pp. 359-432.
✓	C3	Y. Suzuki et al., "Oxygen Supply Method Using Gas Permeable Film for Wastewater Treatment," Wat.SciTech., Vol. 28, No. 7, pp. 243-250, 1993.
✓	C4	M. Pankhania et al., "Hollow Fibre Bioreactor for Wastewater Treatment Using Bubbleless Membrane Aeration, Wat.Res., Vol. 28, No. 10, pp. 2233-2236, 1994.
✓	C5	Pierre Cote et al., "Bubble-Free Aeration Using Membranes: Process Analysis," Journal WPCF, Vol. 60, Number 11, pp. 1986-1992, Nov. 1988.
✓	C6	Pierre Cote, "Bubble-Free Aeration Using Membranes: Mass Transfer Analysis," Journal of Membrane Science, 47 (1989) 91-106.
✓	C7	Keith Brindle et al., "The Application of Membrane Biological Reactors for the Treatment of Wastewaters," Biotechnology and Bioengineering, Vol. 49, pp. 601-610 (1996).
✓	C8	E. Casey et al., "Review of Membrane Aerated Biofilm Reactors," Resources, Conservation and Recycling 27 (1999) 203-215.
✓	C9	D'Agustino et al., "Chemical Mechanisms in C ₃ F ₈ -H ₂ Radiofrequency Discharges," Plasma Chemistry and Plasma Processing, 4, 21-30, 1984.
✓	C10	Ito et al., "pH-Sensitive Gating by Conformational Change of a Polypeptide Brush Grafted onto a Porous Polymer Membrane", Journal Am.Chem. Soc., 119, 1619-1623 (1997).
✓	C11	Akhtar et al., "Coatings reduce the fouling of microfiltration membranes", J.Membr.Sci., 107, 209-218 (1995).
✓	C12	Iwata et al., "Preparation of Anti-Oil Stained Membrane by Grafting Polyethylene Glycol Macromer onto Polysulfone Membrane", J.Appl.Polym.Sci., 54, 125-128 (1994).
✓	C13	Iwata et al., "Preparation and Properties of Novel Environment-Sensitive Membranes Prepared by Graft Polymerization onto a Porous Membrane", J.Membr.Sci., 38, 185-199 (1988).
✓	C14	Thom et al., "Photochemical Grafting of Poly(Ethylene Glycol)s Yielding Low-Protein-Adsorbing UF Membranes", Acta Polytech.Scand., Chem. Technol.Metall.Ser., 247, 35-50 (1997).
✓	C15	Ulbricht et al., "Photo-induced graft polymerization surface modifications for the preparation of hydrophilic and low-protein-adsorbing ultrafiltration membranes", J.Membr.Sci., 115, 31-47 (1996).
✓	C16	Mok et al., "Surface Modification of Polyethersulfone Hollow-Fiber Membranes by Y-Ray Irradiation", J.App.Polym.Sci., 51, 193-199 (1994).
✓	C17	Hautojarvi et al., "Characterization of Graft-Modified Porous Polymer Membranes", Ind.Eng.Chem.Res., 35, 450-457 (1996).

*Examiner: D. Chung	Date Considered: 5/13/05
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement)

Substitute for form 1449A/PTO (modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) Page 5 of 5	Application Number	10/726900
	Filing Date	December 3, 2003
	First Named Inventor	Hester, Jonathan F.
	Art Unit	1771
	Examiner Name	Unknown
	Attorney Case Number	58770US002

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
✓	C18	Hunt et al., "End-Functionalized Polymers. 1. Synthesis and Characterization of Perfluoralkyl-Terminated Polymers via Chorosilane Derivatives", Macromolecules, 26, 4854 (1993).
✓	C19	Elman et al., "A Neutron Reflectivity Investigation of Surface and Interface Segregation of Polymer Functional End Groups", Macromolecules, 27, 5341 (1994).
✓	C20	Affrossman et al., "Surface Segregation in Blends of Hydrogenous Polystyrene and Perfluorohexane End-Capped Deuterated Polystyrene, Studied by SSIMS and XPS", Macromolecules, 27, 1588 (1994).
✓	C21	Schaub et al., "Surface Modification via Chain End Segregation in Polymer Blends", Macromolecules, 29, 3982-3990, (1996).

*Examiner: <i>D. [Signature]</i>	Date Considered: <i>5/13/05</i>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement)